DriveRack™ PA

Complete Equalization & Loudspeaker Control System

dbx®
PROFESSIONAL PRODUCTS

VISIONARY DESIGN

Drive your PA to a whole new level of performance with the DriveRack™ PA Complete Equalization & Loudspeaker Control System. The DriveRack PA from dbx Professional Products represents a complete integration of the key elements that help ensure optimal loudspeaker system management in PA-specific applications. Capitalizing on the legendary 480 DriveRack technology, the DriveRack PA is able to provide its user with top-tier, pro-level loudspeaker management specifications, yet still remain appealing to the budget-conscious audiophile who requires a tried and true utilitarian workhorse. With its all-inclusive, no-compromise design, the DriveRack PA has been systematically developed and designed to grow with your system needs for years to come.

REVOLUTIONARY ENGINEERING

The DriveRack PA continues the legacy of DriveRack series, which has been created by the company that has been redefining the standard of signal processing for more than 30 years. The DriveRack PA was designed with the purpose and vision of providing state-of-the-art signal processing, while utilizing a simple and intuitive user interface. This goal has been achieved by offering two independent channels of processing power with a linkable 28-Band Graphic equalizer, industry-standard dbx® stereo compressor module, feedback eliminator and the 120A Subharmonic Synthesizer on the input, with a six channel output system that includes parametric EQs, and Peak Plus™ limiters (which are used to provide protection against speaker blowouts) and alignment delay. These features combined with the Wizard setup system, represent a methodical design that is guaranteed to deliver optimal, all-inclusive processing in a completely scalable system. For more information, please visit: www.dbxpro.com.

FEATURES

- ***Stereo Feedback Elimination with 12 feedback notch filters***
- ***Dual 28-band Graphic EQ***
- ***Classic dbx® Compressor***
- ***120A Sub-harmonic Synthesizer***
- ***2x3, 2x4, 2x5, 2x6 Crossover Configurations***
- ***Stereo Multi-band Parametric EQ***
- ***Stereo Output Limiters***
- ***Alignment Delay***
- ***Pink Noise Generator***
- ***Auto-EQ with 28-Band RTA***
- ***JBL® Speaker and Crown Power Amp Tunings with Setup Wizard***
- ***25 User Programs / 25 Factory Programs***
- ***2 Channel XLR Input and 6 Channel XLR Output***
- ***Front panel RTA-M XLR input with phantom power***
- ***24-Bit ADC/24-Bit DAC, >110 dB Dynamic Range***
- ***TypeIV® Conversion System***
- ***Full Graphic LCD Display***

8760 S. Sandy Pkwy.
Sandy, Utah 84070
Phone (801) 568-7660
Fax (801) 568-7662
Int'l Fax (801) 568-7583
customer@dbxpro.com
http://www.dbxpro.com
A Harman International Company

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SPECIFICATIONS

Analog Inputs:

Number of Inputs:	(2) Line inputs. (1) RTA Mic input
Connectors:	(2) Female XLR line inputs. XLR RTA Mic input
Type:	Electronically balanced/RF filtered
Impedance:	> 40k Ω
Max input line level:	+20dBu
CMRR:	> 45dB
RTA Mic Phantom Voltage:	+15VDC
RTA Mic EIN:	< -110dBu, 22Hz-22kHz, 150Ω

Analog Outputs:

Number of Outputs:	6
Connectors:	Male XLR
Type:	Electronically balanced, RF filtered
Impedance:	120 ohms
Max Output Level:	+20dBu

A/D Performance:

Type:	dbx Type IV conversion system
Dynamic Range line:	110 dB A-weighted, 107 dB unweighted
Type IV dynamic range:	123 dB with transient material, A-weighted, 22kHz BW 121 dB with transient material, unweighted, 22kHz BW 115 dB typical with program material, A-weighted, 22kHz BW
Sample Rate:	48kHz

D/A Performance:

Dynamic Range:	112 dB A-weighted, 110dB unweighted

System Performance:

Dynamic Range:	110 dB unweighted, >107dB weighted,
THD+N:	0.002% typical at +4dBu, 1kHz, 0dB input gain
Frequency Response:	20Hz – 20kHz, +/- 0.5dB
Interchannel Crosstalk:	>110dB, 120dB typical
Crosstalk input to output:	>100dB
Delay:	10ms per channel (60 ms total)

dbx engineers are constantly working to improve the quality of our products. Specifications are, therefore subject to change without notice.

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dbx PROFESSIONAL PRODUCTS

The Professional's Choice In Signal Processing

A Harman International Company

SPECIFICATIONS

Inputs

Number of Inputs:	4 (Inputs 3 or 4 can be selected as an RTA mic input)
Connectors:	Female XLR
Type:	Electronically balanced/RF filtered
Impedance:	>40kΩ
Max Input line Level:	+30 dBu
Max input RTA Level:	-10 dBu
CMRR:	>40 dB typical, >55 dB at 1kHz
Maximum Input Level:	Hardware selectable for +30, +22, +14 dBu
Input Gain Range RTA:	10 dB to 70 dB w/60 dB typical

Outputs

Number of Outputs:	8
Connectors:	Male XLR
Type:	Electronically balanced, RF filtered
Impedance:	120Ω
Output Transformers:	Optional
Max Output Level:	+26dBu

A/D Performance

Type:	dbx Type IV™ Conversion System
Dynamic Range line:	110 dB unweighted, 115 dB A-weighted
Type IV™ dynamic range:	127 dB with transient material, A-weighted, 22kHz BW 125 dB with transient material, unweighted, 22kHz BW 119 dB typical with program material, A-weighted, 22kHz BW
Sample Rate:	48kHz
A/D Wordlength:	24 bits

D/A Performance

Dynamic Range:	112 dB unweighted, 115 dB A-weighted
Sample Rate:	48kHz
D/A Wordlength:	24 bits

System Performance

Internal Wordlength:	48 bits
THD + Noise:	0.002% typical at +4dBu, 1kHz, 9dB input gain
Frequency Response:	20Hz- 20kHz, +/-0.1dB
Interchannel Crosstalk:	<-85dB at 1kHz, 0dB input gain
Crosstalk input to output:	>+80dB

Pre EQ

Type:	One 31-band Graphic EQ per input channel, or 9 band Parametric EQ per input channel RTA can be substituted for EQ in channels 3 and 4
Range:	+/-15 dB range

Notch Filters

Number:	1-5 per input channel not to exceed 10 for all input channels

Pre Delay

Length:	680ms/channel

Crossover

Type:	1x2, 1x3, 1x4, 1x5, 1x6 2x3, 2x4, 2x5, 2x6, 2x7, 2x8, 3x4, 3x5, 3x6, 3x7, 3x8, 4x6, 4x8
Filter Type:	Butterworth, Bessel, or Linkwitz-Riley
Slope:	6, 12, 18, 24, 36 and 48dB/Octave

Post EQ

Type:	Parametric
Number:	4 EQ bands per output channel
Range:	+/-12 dB range

Dynamics

Type:	Compressor/Limiter with PeakStopPlus™, VariKnee™ and OverEasy®

Post Delay (Driver Alignment)

Length:	170 ms per output channel

Pink Noise Generator

Position:	Pink noise inserted on selected input(s)

Phase Compensation

Number:	One per output channel
Amount:	0-180 degrees phase shift
Output Polarity:	Reversible

Miscellaneous

Output Transformers:	Optional
Network:	Proprietary RS-485 Backbone
GUI:	RS-232 interface for computer display and configuration
Flying Fader Remote:	Optional dbx 480R
ROM Upgrade:	Flash upgradeable through RS-232 and MIDI port

dbx 481S Description
One rack space unit with 4 inputs and 8 output on Euroblock connectors. Internal specifications same as dbx 480.

dbx 482S Description
Two rack space unit with 4 inputs and 8 output on XLR connectors. Output transformers optional. Internal specifications same as dbx 480.

dbx 480R Description
Motorized fader remote control surface for DriveRack™ units.

dbx 480P Description
One rack space power supply for dbx 480R Remote control unit.

- Preliminary specifications, subject to change without notice.

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DriveRack™

Complete Equalization & Loudspeaker Management System

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The **DriveRack™** is a perfect example of why dbx has always been synonymous with innovative ideas and a leader in cutting edge technology. Designed to be the only device necessary between the mixer and the power amps, the DriveRack™ exceeded our goal. Every tool you could ever ask for has been included, and is completely configurable.

The DriveRack™ is an all inclusive loud speaker management system versatile enough to suit any sound reinforcement, monitoring, or install application. There are five components available in the DriveRack™ line providing quick and easy solutions to every imaginable scenario across the audio spectrum.

The DriveRack™ system is comprised of several elements including the **480**, which can act as the master controller unit. The 480 is capable of controlling as many **481S** and **482S** slave units as your application requires through the DriveRack™ network communication interface. In addition, the entire system can be controlled and programmed by a single **480R** remote control unit or by a PC via the GUI interface.

It seems like such a simple idea to have one system capable of handling all of the **post mix processing** and **signal routing**, with one **master controller** capable of communicating with all the processing at once. However, it took the creative insight of a leader in audio innovations to think of it. It's no wonder that dbx has been a legend in the audio industry for over 25 years.

480 DriveRack™

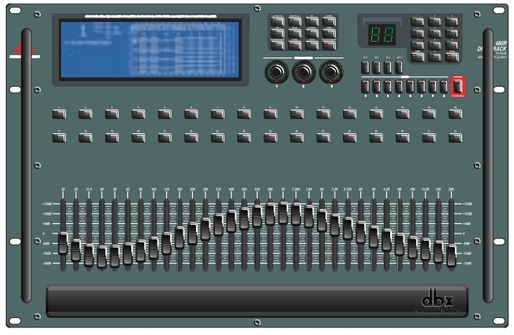
At the heart of the DriveRack™ system is the 480. The 480 includes 4 inputs and 8 outputs which can be tailored for any configuration. By including every form of processing necessary to drive the signal from the mixer to the power amps, such as pre-crossover EQ, notch filters, speaker delay, multiple crossovers, speaker compensation equalizer, driver alignment delay, and compression/limiting, the 480 is truly the only box you'll need for any sound system application. Two real time analyzers can be run simultaneously with RTA source inputs capable of being remotely switched on the fly. The 480 is fully programmable from the front panel, with the 480R remote control, or through a computer via the PC port.

481S DriveRack™

482S DriveRack™

The 481S and 482S include all of the functionality and features of the 480. They both incorporate 4 inputs and 8 outputs with Euroblock connectors on the 481S and XLRs on the 482S. However, they do not include the front panel programming interface. All programming functions can be performed through the 480, the 480R, or via the Windows GUI. An unlimited number of DriveRacks™ can be chained together.

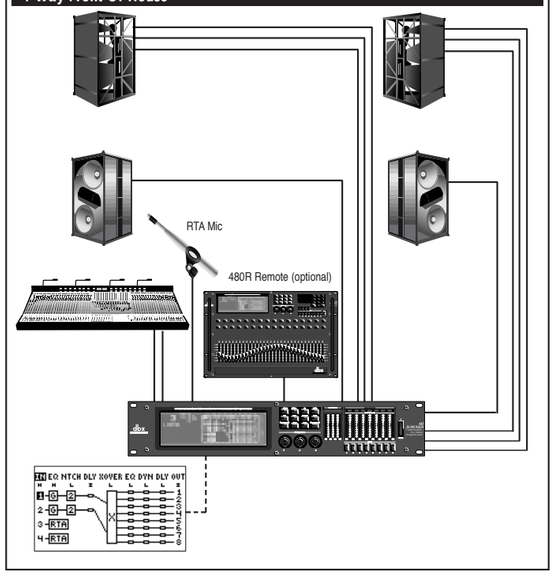
480R Remote for DriveRack™ System



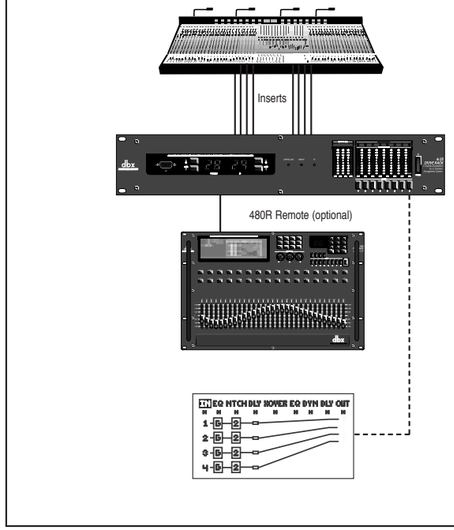
The 480R is the remote controller for the entire DriveRack™ system. It is capable of controlling and programming multiple 480, 481S, and 482S units. It features 31 motorized faders which automatically recall the Graphic EQ settings of any unit on the network. The 480R can simultaneously control multiple DriveRacks™, allowing global EQ adjustments to be made quickly. Thirty-two instant access buttons can be programmed to immediately recall the parameter screens that you use the most. The large custom display mirrors the display of the selected unit, and the 480R also includes its own real time analyzer. The 480R can be stationed up to 500 feet from the master DriveRack™, making it the perfect choice for front-of-house mixing.

480P Power Supply for 480R

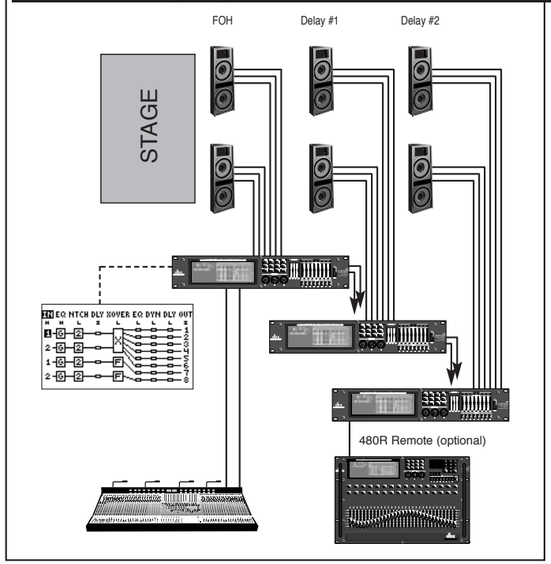
4-Way Front Of House



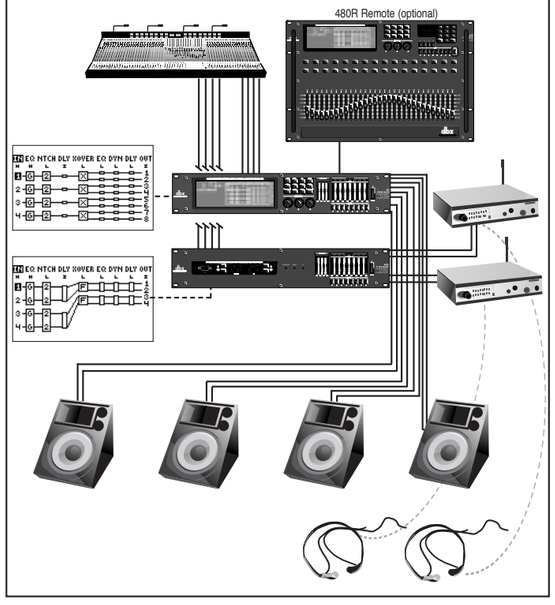
Stand-Alone Monitor EQ



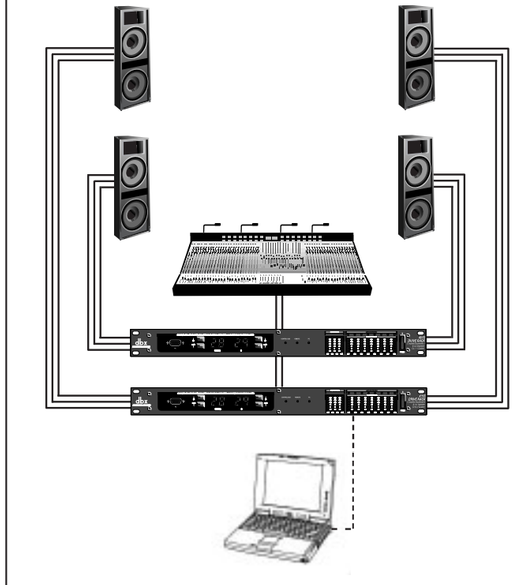
Front of House w/Delay 3-Way Towers



Monitor - BiAmp & In-Ear



Dedicated FOH Cross-Over



L-C-R + Sub + Rear